

FORM PTO-1390 (REV. 11-2000)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTORNEY'S DOCKET NUMBER 3868-0104P
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371			U.S. APPLICATION NO. (If known, see 37 CFR 1.5) 09/980199
INTERNATIONAL APPLICATION NO. PCT/EP00/04970	INTERNATIONAL FILING DATE May 31, 2000	PRIORITY DATE CLAIMED June 2, 1999	
TITLE OF INVENTION PROCESS AND DEVICE FOR MANUFACTURING A PRODUCT FROM STRIP TAPE, ESPECIALLY FOR MANUFACTURING A MEDICINAL AND/OR ACTIVE SUBSTANCE-CONTAINING PRODUCT AS WELL AS FILLABLE CONTAINERS OR SEALED-MARGIN BAGS			
APPLICANT(S) FOR DO/EO/US NEULAND, Detlev; HOFFMANN, Hans-Rainer; SCHAFER, Wolfgang			
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:			
1. <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a filing under 35 U.S.C. 371. 2. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371. 3. <input checked="" type="checkbox"/> This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39 (1). 4. <input checked="" type="checkbox"/> The US has been elected by the expiration of 19 months from the priority date (Article 31). 5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) a. <input checked="" type="checkbox"/> is transmitted herewith (required only if not transmitted by the International Bureau). WO 00/74618 A1 b. <input type="checkbox"/> has been transmitted by the International Bureau. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). 6. <input checked="" type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). a. <input checked="" type="checkbox"/> is transmitted herewith. b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4) 7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)). a. <input type="checkbox"/> are transmitted herewith (required only if not transmitted by the International Bureau). b. <input type="checkbox"/> have been transmitted by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input checked="" type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). Items 11. to 20. below concern document(s) or information included: 11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98, Form PTO-1449(s), and International Search Report (PCT/ISA/210) with 0 document(s). 12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. <input checked="" type="checkbox"/> A FIRST preliminary amendment. 14. <input type="checkbox"/> A SECOND or SUBSEQUENT preliminary amendment. 15. <input type="checkbox"/> A substitute specification. 16. <input type="checkbox"/> A change of power of attorney and/or address letter. 17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821-1.825. 18. <input type="checkbox"/> A second copy of the published international application under 35 U.S.C. 154(d)(4). 19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4). 20. <input checked="" type="checkbox"/> Other items or information: 1.) International Preliminary Examination Report (PCT/IPEA/409) 2.) Three (3) Sheets of Formal Drawings			

JC10 Rec'd PGT/PTO 3 0 NOV 2001

U.S. APPLICATION NO (if known, see 37 CFR 1.51) <div style="font-size: 2em; font-weight: bold; margin-top: 5px;">09/980199</div>	INTERNATIONAL APPLICATION NO <div style="text-align: center; margin-top: 5px;">PCT/EP00/04970</div>	ATTORNEY'S DOCKET NUMBER <div style="text-align: center; margin-top: 5px;">3868-0104P</div>
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21. <input checked="" type="checkbox"/> The following fees are submitted: BASIC NATIONAL FEE (37 CFR 1.492(a)(1)-(5): Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO. \$1,040.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO \$890.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO. \$740.00 International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) \$710.00 International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4). \$100.00 ENTER APPROPRIATE BASIC FEE AMOUNT =	CALCULATIONS PTO USE ONLY																
Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input checked="" type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).	\$ 890.00																
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:20%;">CLAIMS</th> <th style="width:20%;">NUMBER FILED</th> <th style="width:20%;">NUMBER EXTRA</th> <th style="width:20%;">RATE</th> </tr> <tr> <td>Total Claims</td> <td style="text-align: center;">6 - 20 =</td> <td style="text-align: center;">0</td> <td style="text-align: center;">X \$18.00</td> </tr> <tr> <td>Independent Claims</td> <td style="text-align: center;">2 - 3 =</td> <td style="text-align: center;">0</td> <td style="text-align: center;">X \$84.00</td> </tr> <tr> <td colspan="3">MULTIPLE DEPENDENT CLAIM(S) (if applicable) NONE</td> <td style="text-align: center;">+ \$280.00</td> </tr> </table>	CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	Total Claims	6 - 20 =	0	X \$18.00	Independent Claims	2 - 3 =	0	X \$84.00	MULTIPLE DEPENDENT CLAIM(S) (if applicable) NONE			+ \$280.00	\$ 130.00
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE														
Total Claims	6 - 20 =	0	X \$18.00														
Independent Claims	2 - 3 =	0	X \$84.00														
MULTIPLE DEPENDENT CLAIM(S) (if applicable) NONE			+ \$280.00														
TOTAL OF ABOVE CALCULATIONS =	\$ 1020.00																
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.	\$ 0.00																
SUBTOTAL =	\$ 1020.00																
Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).	\$ 0.00																
TOTAL NATIONAL FEE =	\$ 1020.00																
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +	\$ 0.00																
TOTAL FEES ENCLOSED =	\$ 1020.00																
	Amount to be: refunded \$ charged \$																

a. ☒ A check in the amount of \$ **1020.00** to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account. No. _____ in the amount of \$ _____ to cover the above fees.
 A duplicate copy of this sheet is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any
 overpayment to Deposit Account No. 02-2448.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR
 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

Send all correspondence to:
Birch, Stewart, Kolasch & Birch, LLP or Customer No. 2292
P.O. Box 747
Falls Church, VA 22040-0747
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Date: November 30, 2001

By James M. Slattery By No
 James M. Slattery, #28,380 B2,334

/rem

09/980199

JC10 Rec'd PCT/PTO 3 0 NOV 2001

PATENT
3868-0104P

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant: NEULAND, Detlev et al.
Int'l. Appl. No.: PCT/EP00/04970
Appl. No.: New Group:
Filed: November 30, 2001 Examiner:
For: PROCESS AND DEVICE FOR
MANUFACTURING A PRODUCT FROM STRIP
TAPE, ESPECIALLY FOR MANUFACTURING
A MEDICINAL AND/OR ACTIVE
SUBSTANCE-CONTAINING PRODUCT AS
WELL AS FILLABLE CONTAINERS OR
SEALED-MARGIN BAGS

PRELIMINARY AMENDMENT

BOX PATENT APPLICATION

Assistant Commissioner for Patents
Washington, DC 20231

November 30, 2001

Sir:

The following Preliminary Amendments and Remarks are respectfully submitted in connection with the above-identified application.

AMENDMENTS

IN THE SPECIFICATION:

Please amend the specification as follows:

Before line 1, insert --This application is the national phase under 35 U.S.C. § 371 of PCT International Application No. PCT/EP00/04970 which has an International filing date of May 31, 2000, which designated the United States of America.--

REMARKS

The specification has been amended to provide a cross-reference to the previously filed International Application.

An early and favorable first action on the merits is earnestly solicited.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By Joe M. Slattery ^{Rep No} 32334
James M. Slattery, #28,380

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3868-0104P

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3/PR TS

Process and device for manufacturing a product from strip tape, especially for manufacturing a medicinal and/or active substance-containing product as well as fillable containers or sealed-margin bags

5

The invention relates to a process for manufacturing a product from strip tape, especially a medicinal and/or active substance-containing product such as, for example, dermal or transdermal patches or another administration form, for example for oral application, as well as fillable containers or sealed-margin bags, in which process there is used as starting material a broad, active agent-containing web of material, for instance of sheet-like materials and, in particular, of active substance-containing sheeting or sheet-like active substance, said process comprising at least two of the following steps:

- separating the broad web of material into individual, narrow strips and, if necessary, winding the strips in individual coils or jointly twisting the strips.
- unwinding individual coils or pairs of coils, as required, and assembling at least two strips at a time to form a strip web, or unwinding the strip web wound up from individual strips.
- processing the web of material to form a product made-up of strip tape,
- performing final process steps as, for instance, manufacturing the final product, forming the final application form, laminating the carrier material, segregating, packaging etc.

For manufacturing the above-mentioned products, strip tape consisting of a plurality of individual strips is used.

This tape is made by separating a coil of the starting material into individual strips, said coil having a width
5 resulting from the number of strips multiplied by the width of the strips plus edge trimming.

Typically, the resultant strips are wound on reels and are jointly unwound in the number as required and assembled to form webs of material having at least two layers.

10 The manufacture of the stock reels is very labour-intensive, as is the winding and unwinding of the individual strips.

It is possible, here, that the material - which may be an active substance-containing material or a medicinal
15 substance - is stretched impermissibly, with the unavoidable elongation of the material having a negative effect on the dosing accuracy of the medicinal substance.

It is the object of the present invention to provide a
20 process and a device suitable for carrying out said process which overcome the aforementioned disadvantages, difficulties and technical limitations, and, in particular, enable the manufacture of a strip tape product, especially preferred an active substance-containing product, at
25 reduced expenditure in respect of work and costs and without disadvantageous elongation of the material.

To achieve this object in a process of the kind mentioned at the outset, it is proposed according to the invention

- 30 - that a roll of material with a broad web of the starting material be mounted, loosely rotatable, on a take-up mandrel,
- that the web of material be drawn, in its entire width
35 and without subjecting the material to tensile stress, from the roll of material by means of a vacuum roll,

or a device comprising two rolls, which unwinds the material gently from the material roll with one of the rolls simultaneously serving as a counter support to the cutting knives; the material being separated in the process into individual strips in the negative pressure zone of the vacuum roll by rolling a multiple circular knife roll,

- that at the end of the negative pressure zone of the vacuum roll or of the pair of rolls, each strip be drawn from the said vacuum roll or pair of rolls and be introduced in a take-up channel and continuously conveyed therein by means of negative pressure,
- that in the process each strip is turned on its way to the channel or through the channel by about 90°, and
- that at the end of the channels the strips be led one upon the other, at least two at a time, and thereafter conveyed in a, preferably open, groove for further processing under completion to form the final product, to a conversion equipment where the products are finished.

One embodiment of the process provides that for drawing the web of material and separating it into strips in co-operation with the multiple circular knife roll, there is used instead of a vacuum roll, a smooth stripping roll cooperating in a zone where the web of material travels around the roll with a pressure roll and a guide roll.

A device for the manufacture according to the present invention of a product from strip tape, especially of a medicinal and/or active substance-containing product such as, for example, a dermal or transdermal patch or another administration form, for example for oral application, as

well as fillable containers or sealed-margin bags,
especially for carrying out the process according to the
invention,

5 is characterized in that:

- as a means for drawing off and separating the web of
material a vacuum roll is provided, in whose web-travelling
zone the web of material, held by the negative pressure,
10 can be severed into individual strips in cooperation with
the multiple circular knife roll,

- to each strip there is associated a vacuum conveyor
channel which is designed such that each strip is turned on
15 its way to the channel or through the channel by about 90°,
and

- the ends of all the take-up channels 12 are brought
together at one site to form a unit and that at that site
20 there are provided guide means and transport means for the
further transport to a conversion equipment.

One embodiment of the device according to the invention
provides that as means for drawing the web of material and
25 for transport during the separation into strips in co-
operation with the multiple circular knife roll, there is
provided instead of a vacuum roll, a smooth stripping roll
arranged in a zone where the web of material travels around
the roll and adapted to cooperate with a pressure roll and
30 a guide roll.

The process according to the invention and the device
provided for carrying out the same overcome the afore-
mentioned disadvantages, difficulties and technical
35 limitations of the prior art and, in particular, enable the
manufacture of medicinal and/or active substance-containing

products at reduced expenditure in terms of work and costs without disadvantageous elongation of the starting material.

- 5 Further details, features and advantages of this invention will become apparent from the following explanation of an embodiment example which is schematically illustrated in the figures.

The figures show:

- 10 Fig. 1: a side view of the device
 Fig. 2: a plan view of the device according to Fig. 1
 Fig. 3: a partial view of the device with vacuum transport channels disposed at the end of the device.
 15 Fig. 4: a view of the device in which a smooth stripping roll is provided instead of a vacuum roll.

The part of the device represented in Fig. 1 shows rolls of material 1 with a web 2 of the starting material in a
 20 duplicate arrangement on both sides of a plane of symmetry x-x, said rolls 1 being mounted on take-up mandrels 3, as well as a duplicate arrangement of vacuum rolls 4, and circular knife rolls 5 rolling on said vacuum rolls 4 and the web of material 2 and having a plurality of parallelly
 25 disposed circular knives.

The same device is shown in Fig. 2 in plan view, with rolls of material 1, mounting mandrel 3, the material web 2, which can be uncoiled, vacuum rolls 4, circular knife rolls
 30 5, and strips of material 6 cut from the web 2 and running off the said circular knife rolls 5 at the end of the vacuum zone.

Fig. 3 shows, in part in side view and in part in plan
 35 view, a vacuum roll 4. However, this may also be a stripping roll 8 aided by a guide roll 11, from which

strips 6, cut by a circular knife roll (not shown), are transported in the width of the original web of material 2. For linear take-off of a plurality of strips 6 there are provided vacuum conveyor channels 12, each formed, for example, between two cover plates 13 and 14.

Finally, Fig. 4 shows an alternative embodiment of the device wherein as means for drawing the material web 2 and for transport thereof during separation of the web of material in strips 6 in cooperation with a multiple circular knife roll 5 there is provided instead of a vacuum roll a smooth stripping roll 8 which is arranged in a zone in which the material web 2 travels around the roll and is adapted so as to cooperate with a pressure roll 10 and a guide roll 11.

The process and device are uncomplicated, reduce the expenditure of work and costs required heretofore, and enable the manufacture from strip tape of medicinal and/or active substance-containing products of various design, or of fillable containers or sealed-margin bags, while avoiding a disadvantageous elongation of the material, and, in particular, using a starting material in the form of sheet-like material, preferably a sheet-like active substance-containing administration form.

The present invention thus constitutes an optimal solution to the task presented at the outset.

C L A I M S

1. Process for manufacturing a product from strip tape, in particular a medicinal and/or active substance-
 5 containing product such as, for example, a dermal or transdermal patch or another administration form, for example for oral application, as well as fillable containers or sealed-margin bags,

10 characterized in that

- a roll of material (1) with a broad web of material (2) is mounted, loosely rotatable, on a take-up mandrel (3),
- 15 - a web of material (2) is drawn, in its entire width and without subjecting the material to tensile stress, from the roll of material (1) by means of a vacuum roll (4), and is separated in the process into individual strips (6) in the negative pressure zone of the vacuum roll (4) by rolling a multiple circular knife roll (5),
- 20 - at the end of the negative pressure zone of the vacuum roll (4), each strip (6) is drawn from the said vacuum roll (4) and is introduced in a take-up channel (7) and continuously conveyed therein by means of negative pressure,
- 25 - in the process, each strip (6) is turned on its way to the channel or through the channel (7) by about 90°, and
- 30 - at the end of the channels (7) the strips (6) are led one upon the other, at least two at a time, and thereafter conveyed further in a, preferably open,
- 35

groove for further processing under completion to form the finished medicinal and/or active substance-containing product or fillable containers or sealed-margin bags in a conversion equipment where the products are finished.

2. Process according to Claim 1, characterized in that as broad webs of material, sheet-like materials are used.

3. Process according to Claim 1, characterized in that as broad webs of material, active substance-containing sheet-like administration forms are used.

4. Process according to Claim 1, characterized in that for drawing the web of material (2) and separating the same into strips (6) in cooperation with a multiple circular knife roll (5) there is used instead of a vacuum roll, a smooth stripping roll (8) which in a zone in which the material web (2) travels around the roll cooperates with a pressure roll (10) and a guide roll (11).

5. Device for manufacturing a product from strip tape, especially a medicinal and/or active substance-containing product such as, for instance, a dermal or transdermal patch or another administration form, for example for oral application, as well as fillable containers or sealed-margin bags, especially for carrying out the process according to the invention,

characterized in that:

- as a means for drawing off and separating the web of material (2) a vacuum roll (4) is provided, in whose web-travelling zone the web of material (2), held by the negative pressure, can be severed into individual strips

(6) in cooperation with the multiple circular knife roll (5),

- to each strip (6) there is associated a vacuum conveyor channel (12) which is designed such that each strip (6) is turned on its way to the channel or through the channel (12) by about 90°, and

- the ends of all the take-up channels (12) are brought together at one site to form a unit and that at that site there are provided guide means and transport means for the further transport to a conversion equipment.

6. Device according to Claim 5, characterized in that as means for drawing the web of material (2) and for transport during the separation into strips (6) in cooperation with a multiple circular knife roll (5), there is provided instead of a vacuum roll, a smooth stripping roll (8) arranged in a zone where the web of material (2) travels around the roll and adapted to cooperate with a pressure roll (10) and a guide roll (11).

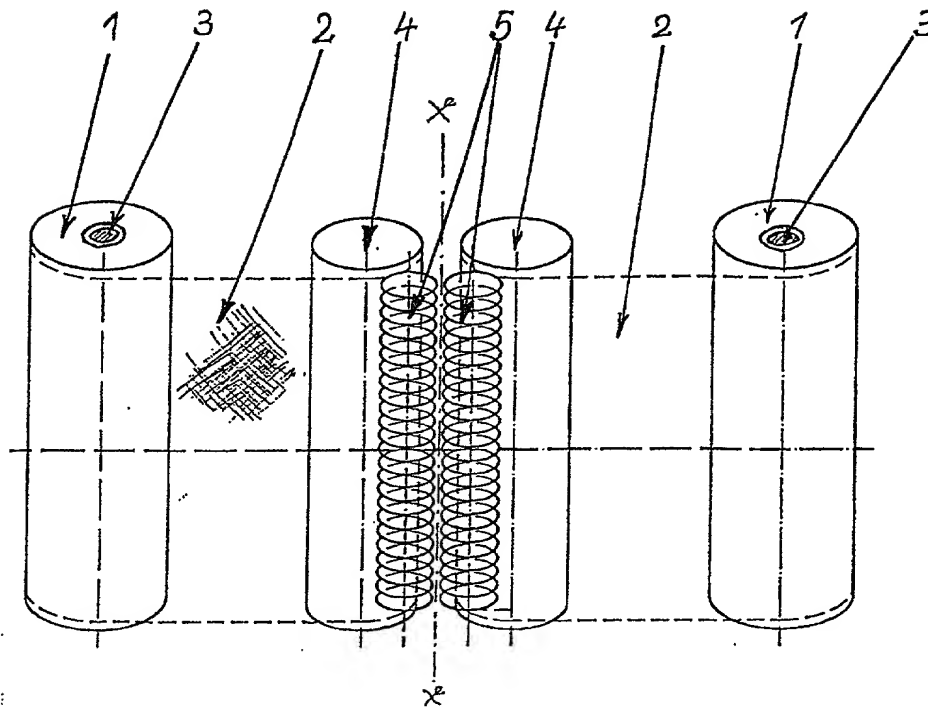


FIG. 1

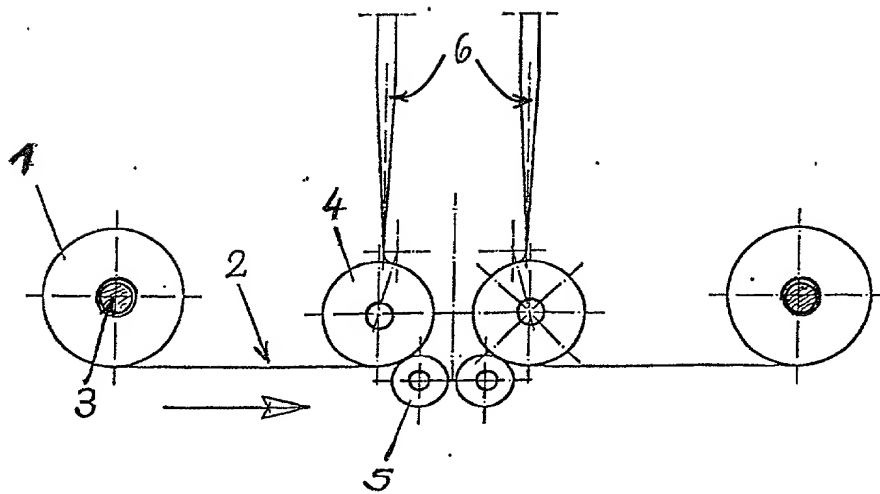


FIG. 2

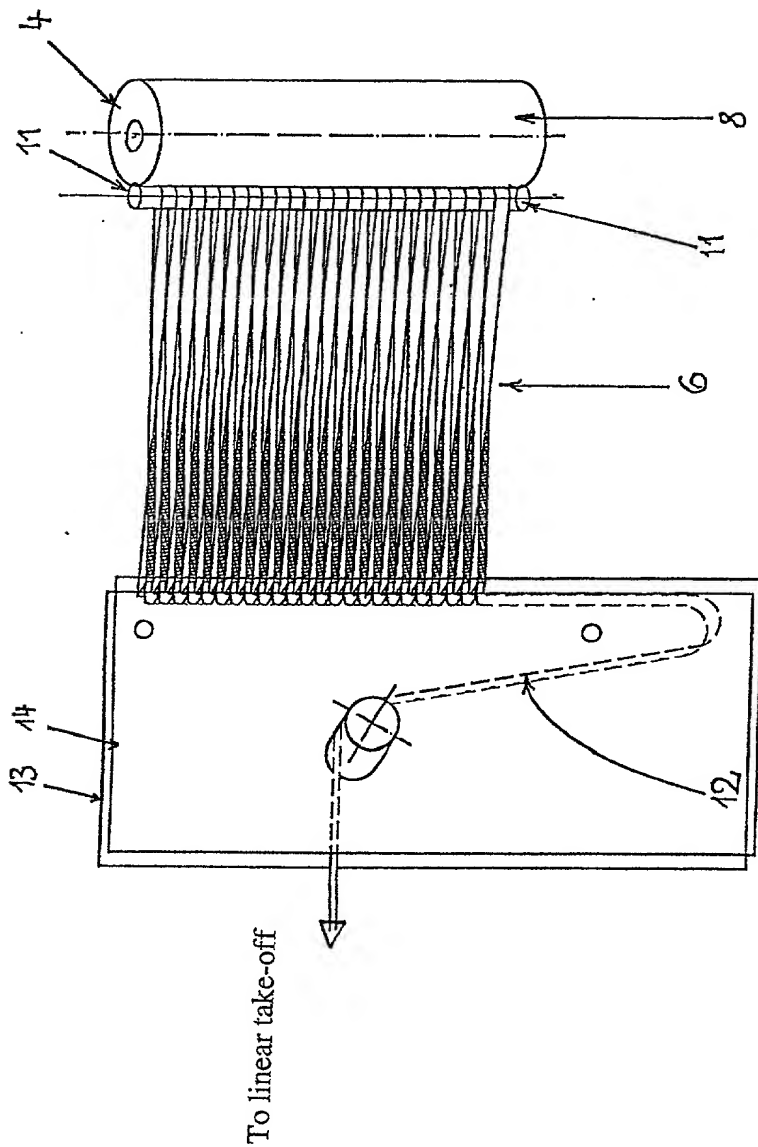


FIG.3

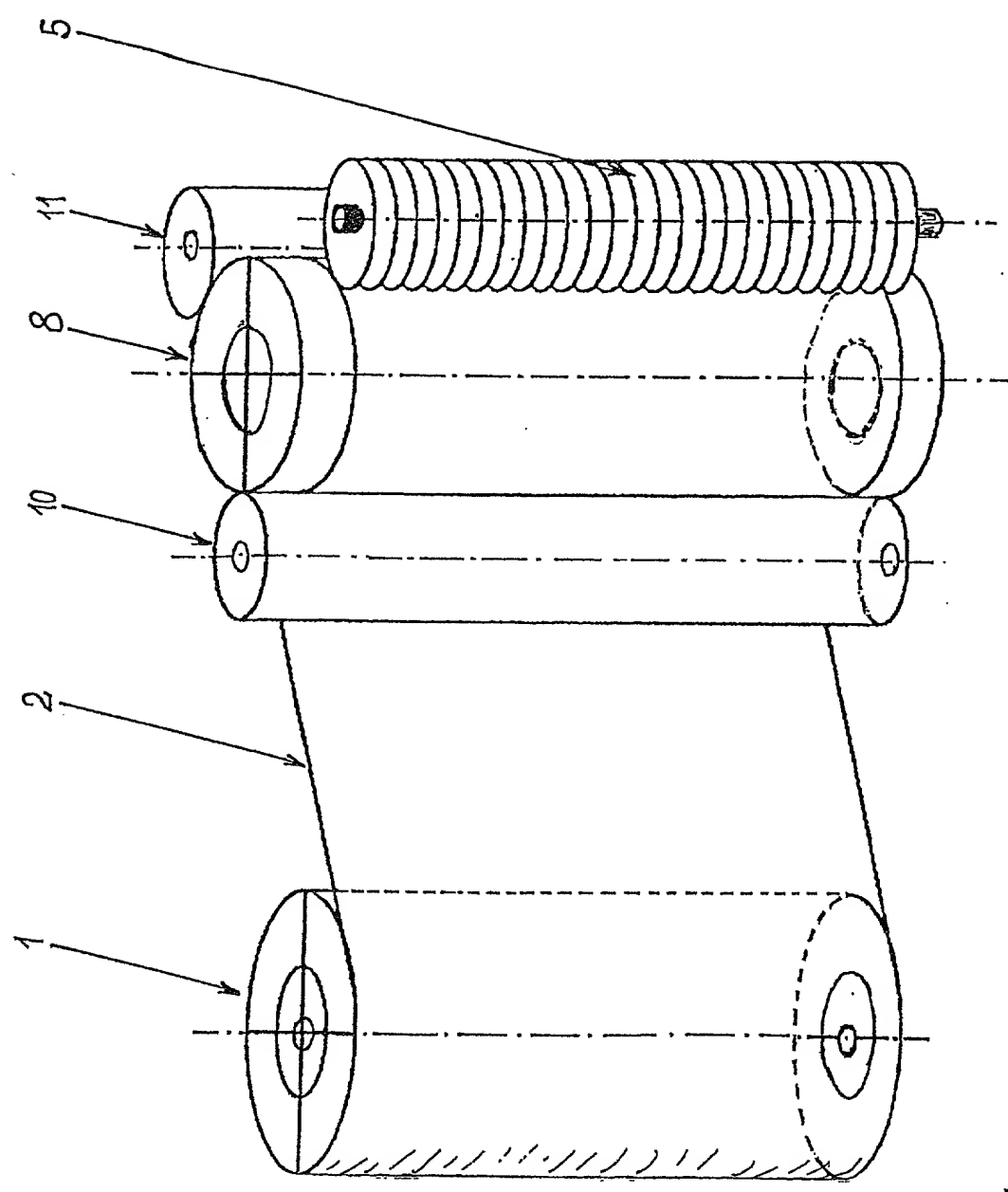


FIG.4

Attorney Docket No. 3868-0104P

BIRCH, STEWART, KOLASCH & BIRCH, LLPP.O. Box 747 • Falls Church, Virginia 22040-0747
Telephone: (703) 205-8000 • Facsimile: (703) 205-8050PLEASE NOTE:
YOU MUST
COMPLETE THE
FOLLOWING**COMBINED DECLARATION AND POWER OF ATTORNEY
FOR PATENT AND DESIGN APPLICATIONS**

As a below named inventor, I hereby declare that: my residence, post office address and citizenship are as stated next to my name; that I verify believe that I am the original, first and sole inventor (if only one inventor is named below) or an original, first and joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Insert Title:

PROCESS AND DEVICE FOR MANUFACTURING A PRODUCT FROM STRIP TAPE, ESPECIALLY FOR MANUFACTURING A MEDICINAL AND/OR ACTIVE SUBSTANCE-CONTAINING PRODUCT AS WELL AS FILLABLE CONTAINERS OR SEALED-MARGIN BAGS

Fill in Appropriate
Information -
For Use Without
Specification
Attached:

the specification of which is attached hereto. If not attached hereto,

the specification was filed on _____ as

United States Application Number _____

and amended on _____ (if applicable) and/or

the specification was filed on May 31, 2000 as PCTInternational Application Number PCT/EP00/04970 and was

amended on _____ (if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

I do not know and do not believe the same was ever known or used in the United States of America before my or our invention thereof, or patented or described in any printed publication in any country before my or our invention thereof or more than one year prior to this application, that the same was not in public use or on sale in the United States of America more than one year prior to this application, that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representative or assigns more than twelve months (six months for designs) prior to this application, and that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States of America prior to this application by me or my legal representatives or assigns, except as follows.

I hereby claim foreign priority benefits under Title 35, United States Code, §119(a)-(d) of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)**Priority Claimed**

Insert Priority
Information:
(if appropriate)

199 25 339.0

(Number)

GERMANY

(Country)

June 2, 1999

(Month/Day/Year Filed)

☒

Yes

☐

No

(Number)

(Country)

(Month/Day/Year Filed)

☐

Yes

☐

No

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional applications(s) listed below.

Insert Provisional
Application(s):
(if any)

(Application Number)

(Filing Date)

(Application Number)

(Filing Date)

All Foreign Applications, if any, for any Patent or Inventor's Certificate Filed More than 12 Months (6 Months for Designs) Prior to the Filing Date of This Application:

Country

Application Number

Date of Filing (Month/Day/Year)

Insert Requested
Information:
(if appropriate)

I hereby claim the benefit under Title 35, United States Code, §120 of any United States and/or PCT application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States and/or PCT application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information which is material to the patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

Insert Prior U.S.
Application(s):
(if any)

(Application Number)

(Filing Date)

(Status - patented, pending, abandoned)

(Application Number)

(Filing Date)

(Status - patented, pending, abandoned)

Attorney Docket No.

I hereby appoint the practitioners at **CUSTOMER NO. 2292** as my attorneys or agents to prosecute this application and/or an international application based on this application and to transact all business in the United States Patent and Trademark Office connected therewith and in connection with the resulting patent based on instructions received from the entity who first sent the application papers to the practitioners, unless the inventor(s) or assignee provides said practitioners with a written notice to the contrary:

Send Correspondence to:

BIRCH, STEWART, KOLASCH & BIRCH, LLP or CUSTOMER NO. 2292

P.O. Box 747 • Falls Church, Virginia 22040-0747

Telephone: (703) 205-8000 • Facsimile: (703) 205-8050

PLEASE NOTE:
YOU MUST
COMPLETE
THE
FOLLOWING:

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of First
or Sole Inventor:
Insert Name of
Inventor
Insert Date Full
Document is Signed

Insert Residence
Insert Citizenship

Insert Post Office
Address

Full Name of Second
Inventor, if any:
see above

Full Name of Third
Inventor, if any:
see above

Full Name of Fourth
Inventor, if any:
see above

Full Name of Fifth
Inventor, if any:
see above

Full Name of Sixth
Inventor, if any:
see above

GIVEN NAME/FAMILY NAME Detlev NEULAND	INVENTOR'S SIGNATURE <i>[Signature]</i>	DATE* X 01.25.2002
Residence (City, State & Country) X West Caldwell, NJ, USA	CITIZENSHIP German	
MAILING ADDRESS (Complete Street Address including City, State & Country) X 21 Henderson Drive, West Caldwell, NJ 07006, USA		
GIVEN NAME/FAMILY NAME Wolfgang SCHÄFER	INVENTOR'S SIGNATURE <i>[Signature]</i>	DATE* X 01.25.2002
Residence (City, State & Country) X Ledgewood NJ 07852 USA	CITIZENSHIP German	
MAILING ADDRESS (Complete Street Address including City, State & Country) X 73 Drake Lane		
GIVEN NAME/FAMILY NAME Hans-Rainer HOFFMANN	INVENTOR'S SIGNATURE <i>[Signature]</i>	DATE* 01.25.2002
Residence (City, State & Country) Burghofstr. 123, 56566 Neuwied, Germany	CITIZENSHIP German	
MAILING ADDRESS (Complete Street Address including City, State & Country) Burghofstr. 123, 56566 Neuwied, Germany		
GIVEN NAME/FAMILY NAME	INVENTOR'S SIGNATURE	DATE*
Residence (City, State & Country)	CITIZENSHIP	
MAILING ADDRESS (Complete Street Address including City, State & Country)		
GIVEN NAME/FAMILY NAME	INVENTOR'S SIGNATURE	DATE*
Residence (City, State & Country)	CITIZENSHIP	
MAILING ADDRESS (Complete Street Address including City, State & Country)		
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MAILING ADDRESS (Complete Street Address including City, State & Country)		